## Abstract of the Disclosure

The present invention provides probes functionalized with nanoparticles, methods for binding nanoparticles to the probes and the use of such probes in nanometer scale imaging techniques. More specifically, the present invention provides a tip device having at least a portion thereof with an outer surface bound to at least one sub-layer of a material comprising nanoparticles, the nanoparticles acting as donors, acceptors, modifiers, quenchers and/or enhancers with respect to electromagnetic radiation.